## S EPODOC / EPO

PN JP9097026 A 19970408

PD - 1997-04-08

PR - JP19950276685 19950929

OPD - 1995-09-29

TI - DISPLAY PANEL AND ITS PRODUCTION .

AB - PROBLEM TO BE SOLVED: To make it possible to surely recognize the light emittion of LEDs and to ensure the operation of an IR remote controller as well by forming the transmissive parts of the LED light or IR rays of a panel base laminated with a transfer layer of a transfer material thinner than other parts. SOLUTION: This display panel 1 is constituted by laminating the transfer layer 3 of the transfer material or an insert film 7 on the front surface of the panel base 2 consisting of a resin and forming the parts transmitted with the ED light or IR rays, i.e., the parts corresponding to the LEDs 4 arranged on the rear surface of the panel base 2 or the photodetectors 4 for IR remote control to the thickness smaller than the thickness of the other parts. The thickness of the panel base 2 is preferably set at 0.3 to 3mm when this panel is made thin. The resin for forming the panel base 2 includes a polystyrene based resin, etc. The light transmittance of the parts transmitted with the LED light of the panel base 2 is preferably specified to 50 to 100% at 400 to 700nm.

- FUJII KENTARO IN

- NISSHA PRINTING PA

- S09F13/22 ICO

TI

AB

- G09F13/20; B29C45/14; B29C45/16; G09F13/08 IC

- Display panel used in audio devices or electrical appliances consisting of transfer material or inert laminated on surface of panel base having light transmitting part thinner than other parts
- PR - JP19950276685 19950929
- PN JP9097026 A 19970408 DW199724 G09F13/20 004pp
- PA - (NSHA) NIPPON SHASHIN INSATSU KK
- B29C45/14 ;B29C45/16 ;G09F13/08 ;G09F13/20 IC
  - J09097026 A transfer layer consisting of a transfer material, or an insert film is laminated on the surface of a panel base consisting of a resin. In the panel base, the portion for transmitting light emitting diode light, or infrared rays is thinner than the other portions.
  - Also claimed is that the production comprises: (a) superimposing the transfer material on the panel base; (b) heating and pressurising the transfer material and the panel base to stick the transfer layer of the transfer material to the panel base; (c) separating the base sheet of the transfer material to transfer the transfer layer only to the surface of the panel base.
  - Preferably the thickness of the portion for transmitting the light emitting diode light, or the infrared rays is 0.3-3 mm.
  - USE The method produces the display panel. A light emitting diode(s) or a light-receiving element for infrared ray remote control is placed on the bottom surface of the display panel. The display panel is used in audio devices, household electrical appliances, or automobiles.
  - ADVANTAGE The portion for transmitting the light emitting diode light or the infrared rays is thinner than the other parts. The result provides higher light emitting diode brightness through the display panel. Housing the light-receiving element for infrared ray remote control in the display panel provides high remote control sensitivity and assures positive operation.
  - (Dwg.1/4)

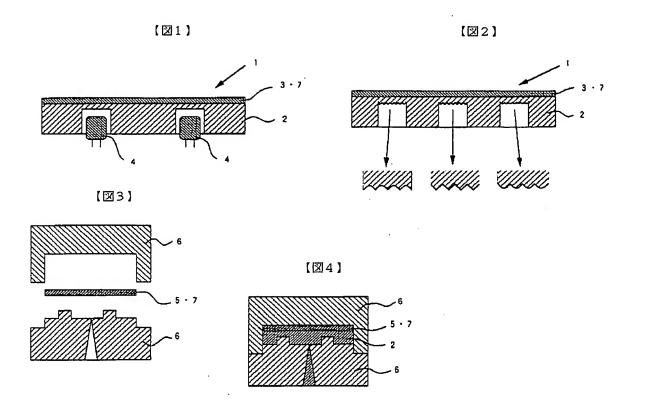
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AB

- AP JP19950276685 19950929
- IN FUJII KENTARO
- PA NISSHA PRINTING CO LTD
- TI DISPLAY PANEL AND ITS PRODUCTION
  - PROBLEM TO BE SOLVED: To make it possible to surely recognize the light emittion of LEDs and to ensure the operation of an IR remote controller as well by forming the transmissive parts of the LED light or IR rays of a panel base laminated with a transfer layer of a transfer material thinner than other parts.
    - SOLUTION: This display panel 1 is constituted by laminating the transfer layer 3 of the transfer material or an insert film 7 on the front surface of the panel base 2 consisting of a resin and forming the parts transmitted with the LED light or IR rays, i.e., the parts corresponding to the LEDs 4 arranged on the rear surface of the panel base 2 or the photodetectors 4 for IR remote control to the thickness smaller than the thickness of the other parts. The thickness of the panel base 2 is preferably set at 0.3 to 3mm when this panel is made thin. The resin for forming the panel base 2 includes a polystyrene based resin, etc. The light transmittance of the parts transmitted with the LED light of the panel base 2 is preferably specified to 50 to 100% at 400 to 700nm.
    - G09F13/20 ;B29C45/14 ;B29C45/16 ;G09F13/08



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